

REMARKS

I. Status of the application

Claims 1-5, 7-10, 12, 13, 15-17, 19, 21-24, and 26 are pending in the application and stand rejected. Claims 1, 5, and 15 are amended and new claims 50-55 are added. Due to the previous cancellation of claims 27-49 it is believed no new claim fee is due for claims 50-55. The amendments and the new claims are fully supported by the specification, drawings, and claims as originally filed, including, for example, at page 2, paragraphs [0009] – [0010].

Applicant requests reconsideration of the claim rejections and re-examination of the application in view of the following remarks.

II. Claims 1, 3-5, 7-10, and 13 are Patentable over Ivory

Claims 1, 3-5, 7-10, and 13 stand rejected under 35 USC § 102(b) over Ivory. This rejection is respectfully traversed.

The inventions defined by independent claims 1 and 5 are patentable over Ivory, because Ivory does not disclose a bulk fluid flow gate comprising all elements required by the claim. Ivory does not disclose at least one electrode and a first fluid flow chamber having a first fluid inlet port, a first fluid outlet port, a second fluid inlet port at a location between the first fluid inlet port and the first fluid outlet port, a device for introducing sample into the first fluid flow chamber through the second fluid inlet port, and a second fluid outlet port, the first fluid outlet port and the second fluid outlet port being on opposite sides of the first fluid inlet port.

Ivory fails to teach or suggest a first fluid flow chamber having a first fluid inlet port, a first fluid outlet port, a second fluid inlet port at a location between the first fluid inlet port and the first fluid outlet port, a device for introducing sample into the first fluid flow chamber through the second fluid inlet port, and a second fluid outlet port, the first fluid outlet port and the second fluid outlet port being on opposite sides of the first fluid inlet port. Ivory discloses device 100 having conduits 114 and 116 which serve as an inlet and an outlet respectively.

Additionally, inlet connection device 318 and outlet connection device 320 are connected to device 100. See Fig. 4, col. 8, lines 17-48 of Ivory.

At page 3 of the final Office Action, it is asserted that inlet and outlet ports are merely labels of intended use. However, inlet connection device 318 and outlet connection device 320 are not merely ports. The Examiner provides no citation for the proposition that outlet connection device 320 is necessarily bi-directional. Further, the clear intended meaning of outlet connection device is a device specifically intended for out-flow from the chamber only. Therefore, outlet connection device 320 has been misconstrued as an inlet port.

The second fluid inlet port of the subject claims is further clarified as an inlet due to its interaction with a device for introducing sample into the first fluid flow chamber through the second fluid inlet port. The inlet can not function as an outlet when it is interacting with a device that introduces sample through the inlet and into the first fluid flow chamber. Therefore, the second fluid inlet port can not operate as an outlet.

In Ivory, inlets 114 and 318 and outlets 116 and 320 are located at opposing ends of the device. Therefore, the first fluid outlet port and the second fluid outlet port can not be on opposite sides of the first fluid inlet port as required by independent claims 1 and 5 of the instant application. Further, additional channels 118 for eluting, identified in Ivory, fail to be in a position with another outlet so as to be on opposite sides of an inlet. See Fig. 4 of Ivory.

Ivory, therefore, fails to teach or suggest a bulk fluid flow gate comprising at least one electrode and a first fluid flow chamber having a first fluid inlet port, a first fluid outlet port, a second fluid inlet port at a location between the first fluid inlet port and the first fluid outlet port, a device for introducing sample into the first fluid flow chamber through the second fluid inlet port, and a second fluid outlet port, the first fluid outlet port and the second fluid outlet port being on opposite sides of the first fluid inlet port and Applicants request the rejection be reconsidered and withdrawn.

Additionally, Ivory fails to disclose any port that is moveable from an angle of about 90 degrees to an obtuse angle. Therefore, Ivory fails to disclose a first fluid inlet port moveable from an angle of about 90 degrees to an obtuse angle, as required by new claims 51, 53, and 55.

III. Claims 2 and 12 are Patentable over Ivory

Claims 2 and 12 stand rejected under 35 USC § 103(a) over Ivory. This rejection is respectfully traversed.

As discussed previously Ivory fails to disclose a bulk fluid flow gate comprising at least one electrode and a first fluid flow chamber having a first fluid inlet port, a first fluid outlet port, a second fluid inlet port, a device for introducing sample into the first fluid flow chamber through the second fluid inlet port, and a second fluid outlet port, the first fluid outlet port and the second fluid outlet port being on opposite sides of the first fluid inlet port as required by independent claims 1 and 5 of which claims 2 and 12 depend, respectively. Therefore, Applicants request that the rejection be reconsidered and withdrawn.

IV. Claims 15-17, 19, 21-24, and 26 are Patentable over Ivory

Claims 15-17, 19, 21-24, 26 stand rejected under 35 USC § 103(a) over Ivory. This rejection is respectfully traversed.

The invention defined by the subject claims is patentable over Ivory because, with respect to each of the subject claims, Ivory does not disclose a method comprising providing a bulk fluid flow gate comprising at least one electrode in communication with a first chamber having a first entry port, a first exit port, a second entry port at a location between the first entry port and the first exit port, a device for introducing sample into the first chamber through the second entry port, and a second exit port, the first exit port and the second exit port being on opposite sides of the first entry port; introducing a sample into the first chamber; applying an electric field to the first chamber; and introducing bulk fluid into the first chamber.

As discussed previously Ivory fails to disclose a first chamber having a first entry port, a first exit port, a second entry port, a device for introducing sample into the first chamber through the second entry port, and a second exit port, the first exit port and the second exit port being on opposite sides of the first entry port. Therefore, Ivory fails to teach or suggest a method

comprising providing a bulk fluid flow gate comprising an electrode in communication with a first chamber having a first entry port, a first exit port, a second entry port at a location between the first entry port and the first exit port, a device for introducing sample into the first chamber through the second entry port, and a second exit port, the first exit port and the second exit port being on opposite sides of the first entry port; introducing a sample into the first chamber; applying an electric field to the first chamber; and introducing bulk fluid into the first chamber. Applicants request the rejection be reconsidered and withdrawn.

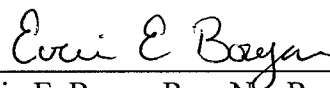
V. Conclusion

Applicants request that the amendments as presented above be entered and that the application be reconsidered. Applicants submit that all claims pending in the application are now in condition for allowance.

A petition for a three-month extension of time under 37 C.F.R. 1.136(a) and the accompanying fee are filed herewith. The Commissioner is hereby authorized to charge any such fees or credit any overpayment of fees to Deposit Account No. 19-0733.

Respectfully submitted,

Dated: 11/8/10



Erin E. Bryan, Reg. No. Reg. 65,948
Customer No. 22910
Banner & Witcoff, LTD.
28 State Street, Suite 1800
Boston, MA 02109
Phone: (617) 720-9600
Fax: (618) 720-9601
e-mail: ebryan@bannerwitcoff.com